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BULLETIN 08-1

We've moved! Effective October 13, 2008 our new address is 375 Jackson Street, Suite 220, St. Paul, Minnesota 55101-1806. All phone & fax numbers remain the same.

1. The 2008 National Electrical Code became effective in the State of Minnesota on September 15, 2008. The '08 NEC will be enforced on all electrical permits obtained on or after that date. Any open permits issued prior to that date may be completed under the 2005 NEC.

2. (Article 100) Definition of "Kitchen". A microwave set on a work surface will not be considered "permanent". Any microwave either mounted on the wall or cabinets, or installed in a space specially designed for the microwave will be considered permanent. Ranges and cooktops are always considered "permanent", even though many are cord-connected.

3. Sect. 210.8- GFCI Protection: Please note there are several significant changes to this section which will increase the number of locations where GFCI protection is required.

4. Sect. 210.12(B): On service panel changes, only new circuits will be required to be on AFCI breakers. It is desirable to have as many circuits as possible protected by AFCI breakers, but since these existing circuits may not be compatible with AFCI's and since the only modification to them is receiving power from a new circuit breaker, they will be considered "old work" and do not require AFCI's. If a new receptacle is installed on an existing circuit, and Sect. 210.12 would require AFCI protection, then the only option at present is to replace the standard circuit breaker with an AFCI type. Otherwise, as was done under the 2005 NEC with bedrooms, a new AFCI-protected circuit would have to be installed for this receptacle. If the only electrical work done in a dwelling is adding a hard-wired smoke detector for sale of the dwelling, since this requirement is a local ordinance and not a requirement of the NEC, we will not require that the new smoke detector be protected by an AFCI breaker. If any other work besides the smoke detector is performed, then we will require any new smoke detector to be on an AFCI-protected circuit, plus all other new work that would be covered by this section.

5. All electrical work, other than minor repair as defined by State Law, requires an electrical permit before the job is started. There are no exceptions for City or State projects.

6. Section 250.94- The new requirement for intersystem bonding will be enforced on all new services and service updates unless it falls under the exception in that Section. If power is run to a second building, the intersystem bonding means is also required at this building. The equipment for this must be listed for the use- especially if it is installed outdoors.

7. Section 406.11(Tamper-resistant receptacles) - This section will be enforced on new dwelling units and any new receptacles installed in existing dwellings if the requirements in 406.11 apply. Remember that new outdoor receptacles covered by Sect. 406.8 must also be listed as weather-resistant.

8. Section 410.130(G) This requirement for disconnecting means for most luminaires went into effect on January 1, 2008 under the 2005 NEC. We will enforce this for any new luminaires installed and for any existing that have ballast replacement.

9. Section 310.15 (B)(2)(c)- Conductors exposed to sunlight on rooftops. The design temperature for St. Paul is 90 degrees F. Temperatures for other areas of the State- and country- vary.

10. Section 406.8- For purposes of this Section, we will not consider a residential basement as a "damp location".

11. Section 250.52(A)(3) is the section that requires concrete-encased electrodes to be part of the grounding electrode system of a building. This requirement originated in the 2005 NEC, so it has been in effect for more than three years, but we still find installations where this has been ignored. These reinforcing rod electrodes may have to be accessed after-the-fact by removing part of the basement floor and making a permanent connection to the re-rod. With the increased use of plastic water service entrances and the limited effectiveness of driven electrodes, these concrete-encased electrodes are the most effective means of ensuring an effectively-grounded system. We can no longer accept a ground ring poured in the basement slab because of the building code requiring a layer of foam under the slab- effectively insulating the slab from earth.
12. Section 210.4(B) requires each multiwire circuit to either have a multi-pole breaker or single breakers with an approved handle tie. This is for simultaneous disconnection of a multiwire circuit since it is in Section 210, not 240. This will be enforced on all new installations and also on existing locations where a substantial remodel of an area is taking place. One example would be an existing office space where all new wired partitions are being installed and connected.
13. Section 210.4(D) requires that all multiwire circuits entering a panelboard or other point of origin be grouped by a wire tie or some other means to indicate which grounded conductor is paired with the ungrounded conductors.
14. Section 348.12 now does not allow Flexible Metal Conduit (commonly known as "greenfield") to be installed in wet locations, including outdoors subject to the weather. We will allow the re-use of the existing FMC for a replacement condensing unit for a central air conditioner, as long as it stays connected to the existing outside disconnect. If the disconnect is replaced or changed in any way other than possibly changing the size of the fuse or breaker in it, then the FMC must be replaced with an approved wiring method. We are also finding quite a few replacement central air conditioners with the wrong size branch circuit short-circuit and ground fault device and/or the wrong size fuse or breaker in the disconnect. These are left over from the older, less efficient unit and if these short-circuit and overcurrent devices are not properly sized, the warranty on the unit may be voided, not to mention being a violation of the NEC. The State law exemption allowing replacement of an existing unit with a new in the same location State law does **NOT** allow unlicensed installers to change the sizing of circuit breakers in a panelboard.
15. A shortcut to our electrical website is:
WWW.stpaul.gov/electrical

The above information is for guidance only and should not be construed as formal interpretations of the National Electrical Code, nor is the information contained in this Bulletin necessarily applicable in any jurisdiction other than St. Paul. These general guidelines are not a complete list, but are indicative of some of the more common violations found by inspectors with the start of the 2008 NEC. Other requirements pertinent to any electrical installation are contained in the 2008 National Electrical Code as adopted by the State of Minnesota as part of the State Building Code.